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EXAMINER

DIVECHA, KAMAL B

ART UNIT PAPER NUMBER

2151

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/754,149

Applicant(s)

DOI ET AL.

Examiner

KAMAL B. DIVECHA

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7-16 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,7-16 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Claims 5, 7-16, 25-28 are pending in this application.

Applicant's arguments with respect to claims 5, 7-16, 25-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation “the mobile gateway” and “the mobile station” in the claim. There is insufficient antecedent basis for this limitation in the claim.

For examining purposes, “the mobile gateway” will be interpreted as a wireless gateway and “the mobile station” will be interpreted as the mobile terminal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 5, 7-16, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al. (hereinafter Stewart, US 6,259,405 B1) in view of Aravamudhan et al. (hereinafter Aravamudhan, US 6,563,919 B1).

As per claim 5 and 14, Stewart discloses a service-providing system (fig. 1A-1C) comprising:

- a mobile terminal having a user identifier (fig. 1A item #110A, fig. 4 item #430);
- a location information provider configured to provide a location information of the mobile terminal to the mobile terminal (col. 6 L6-24);

- a user identification service provider configured to provide a first service requiring a user identification to the mobile terminal (fig. 12A-fig. 12B, fig. 5);
- a user non-identification service provider configured to provide a second service not requiring a user identification to the mobile terminal (i.e. the user id is not required by the service provider, however can provide services, fig. 5 and col. 13 L65 to col. 14 L65);
- a service provider configured to provide a service dependent on the location information (fig. 7, fig 8A-8b, fig. 10A, fig. 11); and
- a wireless gateway configured to control communication among the mobile terminal, the location information provider, and the service provider through a network (fig. 1A-1C and col. 5 L60 to col. 6 L64), wherein the mobile terminal sends a service request including the user identifier, the location information, and a parameter to the wireless gateway (fig. 11 item #1110, col. 6 L39-64, col. 17 L35-62, col. 20 L42 to col. 21 L4) , and wherein the wireless gateway stores communication control information including a service request identifier, a service provider name, the location information, and the parameter (col. 8 L25-32), and
- sends service request information to the service provider, the service request including the service request identifier, the service provider name, the location information and the parameter (col. 20 L42 to col. 21 L19, fig. 10A-10B, fig. 11 item #1120, fig. 12A item #1210, 1220, fig. 12B).

However, Stewart does not disclose the process of converting the user identifier to a temporary identifier and storing the temporary identifier.

Aravamudhan, from the same field of endeavor discloses a gateway that converts the user id to a temporary identifier and storing the user id and the temporary id in a correspondence table (fig. 5 item #72, item #95, fig. 6 item #58, col. 9 L40-51, col. 12 L29-40).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stewart in view of Aravamudhan in order to convert the user id to a temporary id.

One of ordinary skilled in the art would have been motivated because it would have enabled a mechanism for constructing a normalized query (i.e. a request) for retrieving data or service using the temporary identifier (Aravamudhan, col. 10 L17-34).

As per claim 9, Stewart discloses a system wherein the service provider stores service information including the service request identifier, a wireless gateway identifier of the wireless gateway, the location information and the parameter in response to the service request information sent by the wireless gateway (col. 9 L55 to col. 10 L23).

As per claim 10, Stewart discloses the system wherein the service provider creates the service information by referring to the location information and the parameter, and sends service response information including the service request identifier, the location information and the service information to the wireless gateway (col. 15 L55 to col. 16 L67, col. 20 L42 to col. 21 L19, col. 22 L32-67, fig. 10-12).

As per claim 11, Stewart does not disclose a system wherein the wireless gateway reconverts the temporary id corresponding to the service request identifier in the service response information to the user identifier in response to the service response information sent by the service provider.

Aravamudhan discloses a system wherein the wireless gateway reconverts the temporary id corresponding to the service request identifier in the service response information to the user identifier in response to the service response information sent by the service provider (col. 9 L22 to col. 10 L16, fig. 6).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stewart in view of Aravamudhan in order to reconvert the temporary id in the service response to the user id.

One of ordinary skilled in the art would have been motivate because it would have provided the response back to the specific user (Aravamudhan, col. 10 L6-16).

As per claim 15, Stewart discloses the system wherein the wireless gateway sends a user identification service request which is the same as the communication control information to the user identification service provider if the service request is a user identification service request (fig. 5 and col. 12 L25 to col. 13 L49).

As per claim 16, Stewart discloses the system wherein the wireless gateway sends a user non-identification service request, which is the communication control information without the temporary identifier to the user non-identification service provider if the service request is a user non-identification service request (fig. 5, fig. 10-12).

As per claim 25, Stewart does not disclose the system wherein the temporary id is unable to identify the mobile station without the information on converting the user id to the temporary id.

Aravamudhan, from the same field of endeavor discloses the system where the user id identifies the mobile terminal and the temporary id is unable to identify the mobile terminal without information on converting the user id to temporary id (fig. 5, col. 9 L40 to col. 10 L65).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stewart in view of Aravamudhan in order to employ a mechanism for protecting the user identification.

One of ordinary skilled in the art would have been motivated because its known in the art that without a correspondence table between the two identifiers, no one would be able to determine the original user's identity.

As per claim 27, Stewart discloses the process wherein the service request does not include either the user identification or the temporary identifier (fig. 11 and col. 25 L35 to col. 26 L41).

As per claim 28, Stewart does not disclose a system wherein the temporary id is only used by the wireless gateway and the wireless gateway converts the user id to the temporary id without informing the mobile terminal the temporary id.

Aravamudhan, from the same field of endeavor discloses the system wherein the temporary id is only used by the wireless gateway and the wireless gateway converts the user id to the temporary id without informing the mobile terminal the temporary id (fig. 2, fig. 5 item 372, fig. 6 item 358, 60, 66).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stewart in view of Aravamudhan in order to transparently convert the user id.

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One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 5.

As per claims 7, 8, 12, 13, they do not teach or further define over the limitations in claims 5, 9-11, 14-16, 25, 27 and 28. Therefore claims 7, 8, 12, 13 are rejected for the same reasons as set forth in claims 5, 9-11, 14-16, 25, 27 and 28.

2. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al. (hereinafter Stewart, US 6,259,405 B1) in view of Aravamudhan et al. (hereinafter Aravamudhan, US 6,563,919 B1), and further in view of Tsudik (US 6,072,875).

As per claim 26, Stewart in view of Aravamudhan does not disclose the system wherein the service request identifier prevents the service provider from knowing either the user id or the temporay id; and is only used by the mobile gateway to identify the mobile station based on the temporay identifier and the communication control (i.e. one technique to protect the id from the intruders is by using the encryption scheme).

Tsudik, explicitly discloses a system wherein the user identifier and/or other information in a packet is prevented from the outside networks or providers by using the encryption mechanism, which only allows the authorized device with the appropriate information to identify the users by decryption the information (Abstract, col. 3 L59 to col. 4 L55).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Stewart in view of Aravamudhan, and further in view of Tsudik, in order to protect the user identity.

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One of ordinary skilled in the art would have been motivated because it would have avoided traceability and identification of a mobile user, i.e. it would have provided a mechanism where an intruder and/or the service provider is neither able to detect from the encrypted message the identity of the user nor can he/she track a user' move (Tsudik, col. 3 L59 to col. 4 L21).

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Brohoff, US 6,108,533: Geographic Database for Radio System.
- b. Tobita et al., US 6,694,133 B1: Image providing system.
- c. Lopke, US 6,553,310 B1: Method and Apparatus for Topologically based retrieval of information.

Conclusion

In order to expedite the prosecution in the present application, applicant is advised to:

- Clearly define user identification service provider and user non-identification service provider of claim 14. The phrase "not requiring" means that the identification may not be required in order to provide a service, however the service can be provided in a case where the identification is provided.
- Including the purpose of converting the user id to a temporary id may distinguish the invention from the prior art.
- Including a utility and/or problem to be solved in the claim or preamble may distinguish the invention from the prior art.

- Carefully review and overcome all the 112, second paragraph errors in the next response.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

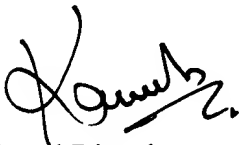
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

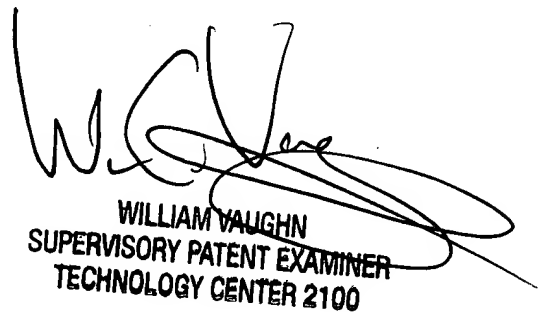
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kamal Divecha
Art Unit 2151
August 30, 2006.



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